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Shen et al.

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(54) **METHODS AND COMPOSITIONS FOR
LIPIDIZATION OF HYDROPHILIC
MOLECULES**

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530/387.1

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(57) **ABSTRACT**

Fatty acid derivatives of sulfhydryl-containing compounds (for example, sulfhydryl-containing peptides or proteins) comprising fatty acid-conjugated products with a disulfide linkage are employed for delivery of the compounds to mammalian cells. This modification markedly increases the absorption of the compounds by mammalian cells relative to the rate of absorption of the unconjugated compounds, as well as prolonging blood and tissue retention of the compounds. Moreover, the disulfide linkage in the conjugate is quite labile in the cells and thus facilitates intracellular release of the intact compounds from the fatty acid moieties.

17 Claims, 8 Drawing Sheets-